

Amendments To The Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A core wire for a guide wire comprising a body portion having a high rigidity and a tip end portion having a rigidity lower than the rigidity of the body portion, wherein at least part of said core wire is made of a copper-based alloy comprising 3-10 weight % of Al and 5-20 weight % of Mn, the balance being substantially Cu and inevitable impurities,

wherein said copper-based alloy wire is formed by hot working and cold working, maintained at a temperature of at least 500°C and then rapidly quenched, and further subjected to an aging treatment comprising heating the high-rigidity body portion at a temperature of 250°-350°C, heating the tip end portion at a temperature of less than 250°, and an intermediate portion between said body portion and said tip end portion at a temperature continuously or stepwise decreasing—changing from the heating temperature of said body portion to the heating temperature of said tip end portion, and wherein said copper-based alloy wire comprises a high-rigidity body portion having a hardness of 350 or more

Hv, a low-rigidity tip end portion having a hardness of 250 or less Hv, and an intermediate portion having a hardness of 50 or more Hv between said high-rigidity body portion and said low-rigidity tip end portion, said intermediate portion having rigidity continuously or stepwise ~~decreasing~~ changing from said high-rigidity body portion to said low-rigidity tip end portion.

Claims 2-4 (Canceled)

5. (Original) A guide wire comprising the core wire according to claim 1.

6. (Original) The guide wire according to claim 5 wherein said core wire is coated with a coating selected from the group consisting of Au, Pt, Ti, Pd, and TiN, and optionally with a resin.

7. (Currently Amended) A catheter at least partially comprising a metal pipe, said metal pipe being made in at least a tip end portion thereof of a copper-based alloy comprising 3-10 weight % Al and 5-20 weight % of Mn, the balance being substantially Cu and inevitable impurities, wherein said metal pipe is formed by hot working and cold working, maintained at a temperature of at least 500°C and rapidly quenched, and then subjected to an aging treatment at

a temperature distribution that decreases continuously or stepwise in a direction from a base end to a tip end of the catheter, wherein the highest temperature is 250°-350°C and the lowest temperature is lower than 250° in said temperature distribution, ~~and~~ and wherein said catheter ~~is relatively rigid in a body portion and has low rigidity in a tip end portion, and said metal pip has a bending modulus which decreases continuously or stepwise in a direction from a base end to a tip end of the catheter~~ comprises a high-rigidity body portion having a hardness of 380 Hv, a low-rigidity tip end portion having a hardness of 270 Hv, and an intermediate portion having a difference in hardness of 30 Hv between said high-rigidity body portion and said low-rigidity tip end portion, said intermediate portion having rigidity continuously or stepwise changing from said high-rigidity body portion to said low-rigidity tip.

Claims 8-9 (Canceled)

10. (Original) The catheter according to claim 7 wherein said metal pipe has an outer diameter which is at least partially decreasing continuously or stepwise in a direction from a base end to a tip end of said catheter.

11. (Original) The catheter according to claim 7 wherein said metal pipe is coated with a coating selected from the group consisting of Au, Pt, Ti, Pd, and TiN and optionally a resin.

12. (Currently Amended) A catheter containing a reinforcing metal member in at least part of a catheter tube, said reinforcing metal member being made of a copper-based alloy comprising 3-10 weight % of Al and 5-20 weight % of Mn, the balance being substantially Cu and inevitable impurities wherein said reinforcing metal member is formed by hot working and cold working, maintained at a temperature of at least 500°C and rapidly quenched, and then subjected to an aging treatment at a temperature distribution that decreases continuously or stepwise in a direction from a base end to a tip end of the catheter, wherein the highest temperature is 250°-350°C and the lowest temperature is lower than 250°C, and

~~wherein said reinforcing metal member has a bending modulus which decreases continuously or stepwise in a direction from the base end to a tip end of~~ said catheter comprises a high-rigidity body portion having a hardness of 380 Hv, a low-rigidity tip end portion having a hardness of 270 Hv, and an intermediate portion having a difference in hardness of 30 Hv between said high-rigidity body portion and

said low-rigidity tip end portion, said intermediate portion
having rigidity continuously or stepwise changing from said
high-rigidity body portion to said low-rigidity tip end
portion.

Claims 13-14 (Canceled)

15. (Original) The catheter according to claim 12 wherein said reinforcing metal member is at least one thin copper-based alloy wire extending along said catheter.

16. (Original) The catheter according to claim 12 wherein said reinforcing metal member is a braid of thin copper-based alloy wires.

17. (Original) The catheter according to claim 12 wherein said reinforcing metal member is a coil of a thin copper-based alloy wire.

18. (New) The core wire for a guide wire according to claim 1 wherein said high-rigidity body portion has a hardness of 350-380 Hv, a low-rigidity tip end portion has a hardness of 235-250 Hv, and said intermediate portion has a hardness of 240 to 290 Hv between said high-rigidity body portion and said low-rigidity tip end portion.

19. (New) A guide wire comprising the core wire according to claim 18.

20. (New) The catheter according to claim 7, wherein said intermediate portion has a hardness of 260 to 290 Hv between said high-rigidity body portion and said low-rigidity tip end portion.

21. (New) The catheter according to claim 20, wherein said metal pipe has an outer diameter which is at least partially decreasing continuously or stepwise in a direction from the base end to the tip end of said catheter.

22. (New) The catheter according to claim 19 wherein said metal pipe is coated with Au, Pt, Ti, Pd and TiN, and optionally a resin.

23. (New) The catheter according to claim 12, wherein said intermediate portion has a hardness of 260 to 290 Hv between said high-rigidity portion and said low-rigidity tip end portion.

24. (New) The catheter according to claim 23 wherein said reinforcing metal member is at least one thin copper-based alloy wire extending along said catheter.

25. (New) The catheter according to claim 23 wherein said reinforcing metal member is a braid of thin copper-based alloy wires.

26. (New) The catheter according to claim 23 wherein said reinforcing metal member is a coil of a thin copper-based alloy